Research Track: Goals & Objectives

Overview

The goals and objectives of the Research Track include the Psychiatry Residency’s overall goals and objectives as well as the PGY-specific goals and objectives. By the end of the 4-year Research Track, residents will demonstrate competency in the ACGME Core Competencies as well as the psychotherapy competency areas outlined in the ACGME Program Requirements for Residency Training in Psychiatry:

In order to attain competency in these areas, residents in the Research Track will have a similar clinical schedule to residents in the General Track, will attend the same seminars and will have at least two hours of weekly individual supervision.

Research-Specific Goals and Objectives

The Research Track has the following additional goals:

1. Residents will develop the knowledge and skills necessary to begin to pursue a career in academic psychiatry. This includes working directly on a research project with an established investigator to develop an understanding of how to perform research. Residents will learn relevant research methodologies as well as how to perform statistics, review research literature and write grants. Residents will also learn how to present their research finding, including preparing results for publication.

2. Residents will learn to work within a community of academicians, will acknowledge the responsibility of academicians to the public and will conduct research in an ethical fashion.

Specifically, by the end of training, each resident will:

Knowledge

- explain fundamental aspects of research methodology, including the principles of hypothesis generation and testing, the principle of clinical equipoise and design of clinical trials;
- demonstrate familiarity with the statistical methods pertaining to the resident’s area of interest;
- describe the process of grant funding and compare and contrast the various grant funding mechanisms available, including federal, state and local agencies, non-profit organizations, the pharmaceutical industry;
- describe the knowledge base pertaining to resident’s area of interest (e.g., neuroanatomy, affective neuroscience, molecular biology, genetics, etc.);
- describe the salient ethical issues in research, including (a) the rights of human subjects, (b) appropriate use of animal subjects, (c) professional conduct of research and (d) potential for conflicts of interest;
- explain the process of peer review and its central role in the evaluation and dissemination of research information.
Skills

• make appropriate use of her or his Research Mentor, including scheduling regular meetings, seeking and incorporating academic advice and developing and monitoring an educational plan;
• interact effectively with research faculty and staff at the Department of Psychiatry, at other departments in the University and at other institutions;
• review the medical literature critically in terms of methodological soundness and in terms of relevance to her or his proposed research project;
• critically evaluate the research reports of other investigators, that is, participate in the peer review process;
• develop a well-constructed research hypothesis and propose an appropriate way of testing that hypothesis;
• decide on appropriate research instrument(s) to test the hypothesis, learn how to use the instrument(s) and teach others how to use the instrument(s), and implement the instrument(s);
• develop a research protocol for use in a grant submission and, if human work, IRB proposal;
• select an appropriate grant mechanism, submit a grant and revise/resubmit the grant if necessary;
• complete an application for approval by the local Institutional Review Board or animal care committee and revise/resubmit if necessary;
• if performing human research, write a human subjects consent form that accurately describes the protocol in language that is understandable to potential human subjects;
• prepare a manuscript for publication, including literature search, writing a manuscript, submission for publication and revision/resubmission;
• effectively present research findings at a national academic conference (poster);
• effectively present research findings at a local, regional or national academic conference (presentation);
• effectively present research findings at a Department of Psychiatry Grand Rounds;
• write a “biography” and curriculum vitae appropriate for an academic career;
• develop a career plan that includes short-term goals (1-2 years) related to her or his research project and long-term goals (3-5 years) involving a research fellowship and faculty position.

Attitudes

• demonstrate an investigatory and analytic approach to thinking through research questions;
• work collaboratively with other members of the research team and maintain professional and respectful relationships with others;
• interact appropriately and respectfully with human (or animal) subjects;
• demonstrate accountability to their human subjects, to their research teams and to other medical professionals inside and outside of the Department;
• demonstrate a commitment to excellence and on-going professional development as s/he prepares for the transition for the next stage of an academic career;
• appreciate the need to maintain a balance among research, clinical and educational objectives.
Evaluation of Competency

Residents in the Research Track will be evaluated in an identical fashion to those in the General Track, namely with the use of a broad range of instruments to assess competency. In addition, each resident will meet with her or his Research Mentor on a monthly basis in order to review progress towards attainment of the goals and objectives. Measurable outcomes will include completion of additional coursework pertaining to the research hypothesis, regular involvement in implementation of research in the mentor’s lab, presentations or posters at national meetings, publications and feedback from a departmental Grand Rounds presentation.

The Research Mentor will submit a formative evaluation to the Program Director quarterly for inclusion in the Program Director's semiannual evaluations of the resident.